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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/942,624 | 08/31/2001 | Albert Donald Darby JR. | GEH01 297 DIV | 8374 |

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EXAMINER

CROSLAND, DONNIE L

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 03/21/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,624

Applicant(s)

DARBY ET AL.

Examiner

DONNIE L. CROSLAND

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-50 and 52-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-50 and 52-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 22, 23, 26-35, and 37-50, and 52-57 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Stevens et al.

Stevens shows the method and apparatus of determining the physical order of plural railcars in a train consist where the railcars are connected clearly provides for providing a parameter which varies along the length of the train and transmitting a synchronization signal along the length of train to the local nodes at each car.

Stevens provides for the transmission of a second signal, which propagates through the train at a slower rate than the sync signal and then measuring the difference in time between the receipt of the sync and serial signal at each node.

Stevens provides for the sync and serial signal may be transmitted in any order with one beginning the time period and the other ending the time period. This information is used for serialization.

Stevens provides for the sync and serial signal for transmission through two different mediums, for example, the sync signal is electric and the second signal is a fluid signal transmitted through a brake pipe, col. 2, lines 1-15.

See col. 4 for RF transmission, pneumatic pressure pulse, and different times of arrival.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 24, 25, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens et al.

Stevens suggest maintaining a log in col. 1, lines 44-47.

With respect to claim 36, error determination is analogous to Stevens train controller sorting technique. The counter for counting the number of node measurement parameters in combination with comparison is analogous the error recognition, see col. 2, lines 38-45 and col. 4, lines 64 et seq.

Response to Arguments

Applicant's arguments filed 1-9-03 have been fully considered but they are not persuasive. The issue is whether or not the prior art reference to Stevens et al suggests **measuring the time between the receipt of the last RF transmission from a preceding railcar and the receipt of the pressure pulse.**

The examiner contends that this language is clearly met in Stevens, col. 2, lines 1-15, 30-45, col. 4, lines 17-55, for instance in col. 4, it is clearly realized that two different kinds of signals (for instance rf and brake pressure) on two different mediums are transmitted along the length of the train. The car electronics 30 measures the time

difference between the two signals, col. 4, lines 36-45, and as a result, determining the relative position on the railcar.

Accordingly, Stevens clearly provides that each railcar determines its relative position in the train based on the difference in time between the receipt of a pneumatic signal (second slower speed signal) originating from the HEU and the receipt of a wireless signal from the immediately preceding railcar.

The arguments that Stevens determines the relative position of the railcars as a function of the absolute time between the receipt of the syn signal and the pressure signal are not persuasive since Stevens does not mention absolute time.

Throughout Stevens disclosure the reference is made to **the difference in the two signals is measured and use for serialization**, the two signals being for example a wireless signal in the form of a syn signal and the other signal being in the form of pneumatic (pressure), see col. 4.

The claim language "receipt of a wireless signal from the immediately preceding railcar", clearly reads on Stevens car electronics 30 transmits the time difference on the trainline 10 to each of the other nodes and to the trainline controller 20, col. 4, lines 31-45.

Accordingly, Stevens provides for measuring the time between the receipt of the last RF transmission from a preceding railcar and the receipt of a pressure pulse.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

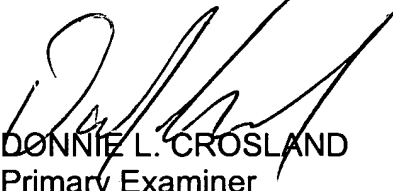
Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNIE L. CROSLAND whose telephone number is (703) 305-4388. The examiner can normally be reached on Mon-Fri, 9:30a-6:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Daniel can be reached on (703) 308-6730. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-9052 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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DONNIE L. CROSLAND
Primary Examiner
Art Unit 2632

Dlc
March 20, 2003